UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

23494

7590

04/20/2004

TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265

EXAMINER CHANG, DANIEL D

ART UNIT

PAPER NUMBER

2819

DATE MAILED: 04/20/2004

1	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
L	09/932.763	08/16/2001	Xiaowei Deng	TI-29320	5414

TITLE OF INVENTION: SILICON-ON-INSULATOR DYNAMIC LOGIC

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$300	\$1630	07/20/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

(703) 746-4000 or Fax INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1) 04/20/2004 7590 23494 Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO, on the date indicated below. TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265 (Depositor's name (Signature CONFIRMATION NO. FIRST NAMED INVENTOR ATTORNEY DOCKET NO. APPLICATION NO. FILING DATE 5414 T1-29320 Xiaowei Deng 09/932,763 08/16/2001 TITLE OF INVENTION: SILICON-ON-INSULATOR DYNAMIC LOGIC TOTAL FEE(S) DUE DATE DUE **PUBLICATION FEE** SMALL ENTITY **ISSUE FEE** APPLN. TYPE 07/20/2004 \$1630 \$300 \$1330 NO nonprovisional CLASS-SUBCLASS ART UNIT EXAMINER 326-121000 2819 CHANG, DANIEL D 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent ☐ "Fee Address" indication (or "Fee Address" Indication form attorneys or agents. If no name is listed, no name PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer will be printed. Number is required. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the USPTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment. (B) RESIDENCE: (CITY and STATE OR COUNTRY) (A) NAME OF ASSIGNEE corporation or other private group entity Please check the appropriate assignee category or categories (will not be printed on the patent); □ individual 4b. Payment of Fee(s): 4a. The following fee(s) are enclosed: ☐ A check in the amount of the fee(s) is enclosed. ☐ Issue Fee ☐ Payment by credit card. Form PTO-2038 is attached. ☐ Publication Fee The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to ☐ Advance Order - # of Copies _ Deposit Account Number (enclose an extra copy of this form). Director for Patents is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above. (Date) (Authorized Signature)

NOTE; The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,763	08/16/2001	Xiaowei Deng	TI-29320	5414
23494	7590 04/20/200-		EXAM	INER
	RUMENTS INCORP	ORATED	CHANG, DANIEL D	
P O BOX 655474, M/S 3999			ART UNIT	PAPER NUMBER
DALLAS, TX 75265			2819 '	
			DATE MAILED: 04/20/200	4

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

	Application No.	Applicant(s)
Notice of Allowability	09/932,763 Examiner	DENG, XIAOWEI Art Unit
nouse of Anomabinity	Examiner	Artomic
	Daniel D. Chang	2819
The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT IS of the Office or upon petition by the applicant. See 37 CFR 1.31	S (OR REMAINS) CLOSED i i) or other appropriate comm RIGHTS. This application is	n this application. If not included unication will be mailed in due course. THIS
1. This communication is responsive to Amendment filed 3/	<u>19/2004</u> .	
2. ☑ The allowed claim(s) is/are <u>1-16</u> .		
3. 🗵 The drawings filed on 10 November 2003 are accepted b	y the Examiner.	
4. Acknowledgment is made of a claim for foreign priority to a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have 1. Copies of the certified copies of the priority documents have 1. Copies of the certified copies of the priority documents have 1. Certified copies of the certified copies of the priority documents have 1. Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE noted below. Failure to timely comply will result in ABANDON THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	ve been received. ve been received in Application ocuments have been receive " of this communication to file	on No d in this national stage application from the
5. A SUBSTITUTE OATH OR DECLARATION must be subr INFORMAL PATENT APPLICATION (PTO-152) which give	ves reason(s) why the oath o	
6. CORRECTED DRAWINGS (as "replacement sheets") mu		
(a) ☐ including changes required by the Notice of Draftsper	=	w (PTO-948) attached
 1) ☐ hereto or 2) ☐ to Paper No./Mail Date (b) ☐ including changes required by the attached Examiner Paper No./Mail Date 	-	r in the Office action of
Identifying indicia such as the application number (see 37 CFR each sheet. Replacement sheet(s) should be labeled as such in		
 DEPOSIT OF and/or INFORMATION about the dep- attached Examiner's comment regarding REQUIREMENT 	OSIT OF BIOLOGICAL MAT FOR THE DEPOSIT OF BI	ERIAL must be submitted. Note the OLOGICAL MATERIAL.
Attachm nt(s)		(
1. Notice of References Cited (PTO-892)		formal Patent Application (PTO-152)
 Notice of Draftperson's Patent Drawing Review (PTO-948) ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/ 	6. ☐ Interview S Paper No. (08). 7. ☐ Examiner's	ummary (PTO-413), /Mail Date Amendment/Comment
Paper No./Mail Date	_	
Examiner's Comment Regarding Requirement for Deposit Richards Material	8. 🗵 Examiners 9. 🗌 Other	Statement of Reasons for Allowance
of Biological Material	9. 🔲 Otilei	- •
		Daniel D. Chang Primary Examiner Art Unit: 2819

Application/Control Number: 09/932,763

Art Unit: 2819

Acknowledgement

Receipt is acknowledged of the Amendment filed March 19, 2004.

Reasons for Allowance

Claims 1-16 are allowable over the prior art of record.

The following is an examiner's statement of reasons for allowance: the best prior art of record, Han et al., taken alone or in combination of other references, does not teach or fairly suggest a dynamic logic circuit comprising, among other things, a pull-down network comprising a plurality of series connected MOS transistors wherein at least one of said plurality of series connected MOS transistors is a NMOS transistor and at least one of said plurality of series connected MOS transistors is a PMOS transistor (claim 1); a pull-down network comprising a plurality of series connected PMOS transistors (claim 5); a pull-down network comprising a plurality of series connected PMOS transistors wherein at least one of said MOS transistors in said pull-down network has a gate tied to a floating substrate body (claim 8); a pull-down network comprising a plurality of parallel connected MOS transistors with a first and second common node, wherein at least one of said plurality of parallel connected MOS transistors is a NMOS transistor and at least one of said plurality of parallel connected MOS transistors is a PMOS transistor (claim 9); a pull-down network comprising a plurality of parallel connected MOS transistors with a first and second common node, wherein at least one of said plurality of parallel connected MOS transistors is a NMOS transistor and at least one of said plurality of parallel connected MOS transistors is a PMOS transistor and at least one of said MOS transistors in said pull-down network has a gate tied to a floating substrate body (claim 12); a pull-down

Application/Control Number: 09/932,763

Art Unit: 2819

network comprising a plurality of parallel connected PMOS transistors with a first and second common node (claim 13); and a pull-down network comprising a plurality of parallel connected PMOS transistors with a first and second common node wherein at least one of said MOS transistors in said pull-down network has a gate tied to a floating substrate body (claim 16), as set forth in the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel D. Chang whose telephone number is (571) 272-1801. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Tokar can be reached on (571) 272-1812. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel D. Chang Primary Examiner

Art Unit 2819

DANIEL CHANG PRIMARY EXAMINER

DC